ABSTRACT

METHOD AND APPARATUS FOR INCINERATING AND VITRIFYING WASTE, IN PARTICULAR RADIOACTIVE WASTE

The present invention provides a method of processing organic waste (D) in divided solid and/or liquid form, the method being implemented in a single reactor (1) containing a bath of molten glass (V) surmounted by a gas phase (G), the method comprising incinerating said waste (D) in the presence of oxygen at the surface (S) of said bath of molten glass (V), and in vitrifying said incinerated waste (D) in said bath of molten glass (V). In said method, and in characteristic manner, in addition to the oxygen delivered as oxidizer into said gas phase (G), oxygen is also injected into said bath of molten glass (V) in a quantity that is sufficient to minimize or to avoid any formation of metal within said bath of glass (V); advantageously in a quantity that is sufficient to minimize or to avoid any formation of metal within said bath of glass (V) to moderate stirring. The present invention also provides apparatus for processing organic waste (D) in divided solid and/or liquid form by incineration and vitrification, the apparatus being suitable for implementing said method.